

In the Claims:

1       1. (original) A method of detecting a redirecting process in  
2       the course of a bi-directional non-contact making  
3       transmission of data between a first transmitting and  
4       receiving unit and a second transmitting and receiving unit  
5       wherein the first transmitting and receiving unit transmits  
6       an interrogation signal, the value of the amplitude (A1) of  
7       the received interrogation signal is measured by the second  
8       transmitting and receiving unit, the measured value of the  
9       amplitude (A1) is transmitted back in a reply signal, and  
10      the value of the amplitude (A2) of the received reply  
11      signal is measured by the first transmitting and receiving  
12      unit and compared with the returned value of the  
13      amplitude (A1).

1       2. (original) A method in accordance with Claim 1, wherein a  
2       predetermined value is assigned to a redirection indicator  
3       in dependence on the result of the comparison.

Claims 3 to 10 (canceled).

1       11. (previously presented) A method in accordance with Claim 1,  
2       wherein the measured value (A1) of the amplitude is  
3       transmitted in encoded form with the reply signal.

1       **12.** (previously presented) A method in accordance with Claim  
2            11, wherein the comparison is carried out within a  
3            predefined time window which begins at the beginning of the  
4            transmission of the interrogation signal.

1       **13.** (previously presented) A method in accordance with Claim 1,  
2            wherein the first transmitting and receiving unit  
3            additionally compares the frequency (F2) of the  
4            interrogation signal with the frequency (F21) of the reply  
5            signal.

1       **14.** (previously presented) A method in accordance with Claim  
2            13, wherein a check is made by the first transmitting and  
3            receiving unit as to whether the carrier frequency is  
4            present, without interruption, from the transmission of the  
5            interrogation signal until the reception of the reply  
6            signal.

1       **15.** (previously presented) A method in accordance with Claim  
2            13, wherein the comparison of the amplitude values (A1, A2)  
3            and the comparison of the frequencies (F1, F21) is carried  
4            out simultaneously with the checking of an identification  
5            code.

1       **16.** (previously presented) The use of the method in accordance  
2            with Claim 1, for detecting unauthorized redirection of an  
3            authentication process employed in motor vehicles.

1       17. (previously presented) A method of bi-directional data  
2           transmission between two transmitting and receiving units  
3           including a first unit and a second unit, said method  
4           comprising the steps:

- 5           a) transmitting a forward signal from said first unit;
- 6           b) receiving said forward signal by said second unit;
- 7           c) in said second unit, measuring a received forward  
8           amplitude of said forward signal as received by said  
9           second unit;
- 10          d) transmitting, from said second unit, a return signal  
11           containing information representing said received  
12           forward amplitude;
- 13          e) receiving said return signal including said  
14           information by said first unit;
- 15          f) in said first unit, measuring a received return  
16           amplitude of said return signal as received by said  
17           first unit; and
- 18          g) comparing said return amplitude with said forward  
19           amplitude to determine any difference therebetween.

1       18. (previously presented) The method according to claim 17,  
2           further comprising permitting said data transmission to  
3           continue if said difference is zero or has a magnitude  
4           below a defined threshold.

1       **19.** (previously presented) The method according to claim 17,  
2           further comprising providing an authorization signal to  
3           allow access to a motor vehicle only if said difference is  
4           zero or has a magnitude below a defined threshold.

1       **20.** (previously presented) The method according to claim 17,  
2           wherein said return signal further contains an  
3           identification code, and wherein said method further  
4           comprises comparing said identification code with an  
5           expected value, and providing an authorization signal only  
6           if said identification code matches said expected value and  
7           said difference is zero or has a magnitude below a defined  
8           threshold.

1       **21.** (previously presented) The method according to claim 20,  
2           further comprising unlocking a lock of a motor vehicle in  
3           response to said authorization signal.

1       **22.** (previously presented) The method according to claim 17,  
2           wherein said information represents said received forward  
3           amplitude in encoded form.

1       **23.** (previously presented) The method according to claim 17,  
2           wherein said forward signal has a forward signal frequency,  
3           said return signal has a return signal frequency, and said  
4           method further comprises comparing said return signal  
5           frequency with said forward signal frequency to determine  
6           any frequency difference therebetween.

1       **24.** (previously presented) The method according to claim 23,  
2           further comprising providing an authorization signal to  
3           allow access to a motor vehicle only if said frequency  
4           difference is zero.

1       **25.** (previously presented) The method according to claim 17,  
2           wherein said forward signal and said return signal both  
3           have the same frequency.

1       **26.** (previously presented) The method according to claim 17,  
2           further comprising checking, in said first unit, whether a  
3           carrier frequency of said forward signal remains  
4           continuously present without interruption from said  
5           transmitting of said forward signal until said receiving of  
6           said return signal.

1       **27.** (previously presented) The method according to claim 17,  
2           wherein said transmitting and receiving by said first unit  
3           are both carried out via a single first unit antenna, and  
4           said transmitting and receiving by said second unit are  
5           both carried out via a single second unit antenna.

1       **28.** (previously presented) A system for bi-directional data  
2           transmission between two transmitting and receiving units  
3           including a first unit and a second unit, wherein:  
4                    said first unit comprises a first antenna, a first  
5                    data processor, a first transmitting amplifier connected

6           between an output of said first data processor and an input  
7           of said first antenna, a first receiving amplifier having  
8           an input connected to an output of said first antenna, and  
9           a first signal processor that has an input connected to an  
10          output of said first receiving amplifier and has an output  
11          connected to an input of said first data processor, and  
12          that is adapted to measure a first received amplitude of a  
13          first signal received via said first antenna and said first  
14          receiving amplifier; and

15           said second unit comprises: a second antenna; a second  
16          data processor; a second transmitting amplifier connected  
17          between an output of said second data processor and an  
18          input of said second antenna; a second receiving amplifier  
19          having an input connected to an output of said second  
20          antenna; and a second signal processor that has an input  
21          connected to an output of said second receiving amplifier  
22          and has an output connected to an input of said second data  
23          processor, and that is adapted to measure a second received  
24          amplitude of a second signal received via said second  
25          antenna and said second receiving amplifier;

26           wherein said second data processor is adapted to  
27          provide information representing said second received  
28          amplitude to said second transmitting amplifier to be  
29          transmitted by said second transmitting amplifier via said  
30          second antenna in said first signal; and

31           wherein said first data processor is adapted to  
32          receive said information in said first signal and to  
33          compare said second received amplitude with said first

34           received amplitude and provide a signal in response to and  
35           dependent on any difference therebetween.

1       **29.** (new) The system according to claim 28, wherein said signal  
2           dependent on said difference indicates whether a  
3           redirection of at least one of said first signal between  
4           said second unit and said first unit or said second signal  
5           between said first unit and said second unit has occurred.

1       **30.** (new) The method according to claim 17, further comprising  
2           a step of determining, based on a result of said comparing  
3           in said step g), whether a redirection of at least one of  
4           said forward signal between said first unit and said second  
5           unit or said return signal between said second unit and  
6           said first unit has occurred.

[RESPONSE CONTINUES ON NEXT PAGE]